

and thus enter the room. The air is charred and dried too much by iron stoves. The porcelain are far preferable. Hot-air pipes are better, and moreover distribute the heat more uniformly; though if the furnace becomes red-hot, poisonous carbonic oxide will pass into the pipes. Some describe the "hot air" as having the "life taken out of it." Hot-water pipes are better than hot-air pipes; the air is not overheated, and a uniform temperature is preserved for a long time. It is much used in hot-houses, baths, drying-rooms, etc.

Exits must be provided for the foul air where the hot-air system, the water-pipes or the gas-stoves are used. For comfort and cheerfulness, no device can equal the open fire-place, fed with coal, or oak and hickory wood, not ignoring either the historic pine.

The fresh air then comes in through the walls, tubes, etc., *cold*, with plenty of oxygen and perhaps ozone in it, and is gradually diffused through the room as it becomes heated, to give up the proper amount of oxygen required for respiration and combustion. What excuse can there be for close rooms, that breed debility of various kinds, when pure, fresh air can be obtained by us at such a small cost?

CHAPTER IV.

WATER SUPPLY.

All of our supplies of water are derived from rain-fall, part of this rain-fall evaporating again, part running off into the streams and thence into the ocean to be again distilled and sent back to us as clouds and rain, and part sinking into the earth and forming the small subterranean streams which furnish the water of our springs and wells. In running over or through the ground, this water takes up such salts as it meets that are soluble. Some of these, together with the air and carbonic acid dissolved, giving the pleasant taste to our usual potable waters.